

**In the Claims:**

**Claim 1** (currently amended)      ~~Membrane~~ A membrane fuel cell delimited by bipolar plates comprising a cathodic compartment and an anodic compartment, said cathodic compartment comprising means for feeding air from the bottom to the top, said anodic compartment comprising means for feeding a hydrogen-containing fuel from the top to the bottom, at least one of said cathodic and anodic compartment comprising a flow distributor consisting of a porous material.

**Claim 2** (original)      The cell of claim 1 wherein said at least one compartment comprising a porous flow distributor is the cathodic compartment.

**Claim 3** (currently amended)      The cell of claim 1 ~~or 2~~ wherein said porous material is selected from the group consisting of three-dimensional reticulated materials, sintered materials, juxtaposed meshes, and juxtaposed expanded sheets.

**Claim 4** (currently amended)      The cell of ~~any one of the previous claims~~ claim 1 wherein said porous material has a porosity dimensioned for generating a gaseous flow pressure variation not higher than 0.5 bar.

**Claim 5** (currently amended)      The cell of ~~any one of the previous claims~~ ~~from claim 1 to 3~~ wherein said porous material has a porosity dimensioned for generating a gaseous flow pressure variation not higher than 0.1 bar.

**Claim 6** (currently amended)      The cell of ~~any one of the previous claims~~  
claim 1 wherein said porous material has a void volume/total volume ratio not lower than  
50%.

**Claim 7** (currently amended)      The cell of claim 6 ~~characterised in that~~  
wherein said ratio is equal to or higher than 75%.

**Claim 8** (currently amended)      The cell of ~~any one of the previous claims~~  
claim 1 comprising a heat extraction device crossed by liquid water in communication  
with said cathodic compartment through calibrated holes on the relevant bipolar plate  
delimiting the cell.

**Claim 9** (currently amended)      ~~Fuel~~ A fuel cell stack comprising a  
multiplicity of cells of the ~~previous claims~~ claim 1.

**Claim 10** (currently amended)      ~~Method~~ A method for operating the cell of  
~~any one of claims from claim 1 to 8 or the stack of claim 9 wherein~~ comprising feeding  
said cathodic compartment ~~is fed~~ with air in a dry state and at a pressure lower than 3  
bar.

**Claim 11** (original)      The method of claim 10 wherein said pressure is lower  
than 1.2 bar.

**Claim 12** (currently amended)      The method of claim 10 ~~or 11~~ wherein the temperature of the air discharged from the upper part of said cathodic compartment is ~~lower~~ less than or equal to the dew point defined by the ratio of moles of water of reaction/overall moles of discharged air and water ~~vapour~~ vapor.

**Claim 13** (original)      The method of claim 12 wherein the regulation of said temperature of discharged air is obtained by adjusting the temperature of a cooling fluid circulating inside the cell.

**Claim 14** (original)      The method of claim 13 wherein said cooling fluid is water injected in the lower part of the cell in the proximity of the air feed.

**Claim 15** (original)      The method of claim 14 wherein said water is injected in the lower part of the cell through calibrated holes present on the bipolar plate facing said cathodic compartment.

**Claim 16** (original)      The method of claim 15 wherein said calibrated holes are in communication with a heat extracting device whence said water injected in the lower part of the cell proceeds.

**Claim 17**(currently amended)      The method of claim 16 wherein the flow-rate of the water flowing in said extracting device is substantially equivalent to the flow-rate if of said water injected through said calibrated holes.

**Claim 18** (currently amended)      The method of ~~any one of claims~~ claim 14 to 17 wherein the regulation of the flow-rate of said injected water is carried out as a function of the electrical current output.

**Claim 19** (original)      The method of claim 18 wherein said regulation is achieved by acting on the operating regime of an injection pump.

**Claim 20** (currently amended)      The method of ~~any one of claims~~ claim 14 to 17 wherein said injected water and said air feed have a constant flow corresponding to the value required for the maximum nominal electrical output.

**Cancel Claim 21.**